#### **ATTACHMENT**

# Status of State response to EPA's July 17, 2014 Letter:

## 1. Drinking Water Source Evaluation

State to provide initial assessment of whether any existing and potential sources of drinking water are at risk of contamination from improper Class II injection (due Sept 15<sup>th</sup>).

- Location of private and public water system wells that may be at risk due to permitted Class
  Il injection
- A plan to ensure protection of human health from actual or potential exposure to DW affected by any injection wells
- A plan to communicate information to the public and to address subsequent questions/concerns

Status: The State Water Board provided a letter on September 15<sup>th</sup> with information about their assessment of drinking wells to date. The State/Regional Board's assessments are tied to DOGGR's ongoing evaluation of injection wells that may be injecting into non-exempt aquifers (DOGGR provided lists/locations of injection wells of potential concern and the State/Regional Board identified water supply wells within a one-mile radius for risk screening). State/Regional Board conducted follow-up based on results of risk screening – e.g., issuing Orders for information, conducting well sampling, notifying well owners and County Health Departments if MCLs are exceeded.

The September 15, 2014 letter contained locations of known water supply wells identified as being at risk from injection wells and also provided a description/plan of the State's process for protecting human health from potential drinking water exposures due to injection wells.

The State/Regional Board's communication plan is intended for specific water supply well owners and County Health Departments (for MCL violations). The letter also noted that the State Board is deferring overall public communications to DOGGR, and noted the July 18<sup>th</sup> press release which identified the enforcement orders to shut down some injection wells and highlighted the UIC program review. The status of this effort has been generally discussed at most of the coordination meetings between EPA and the State. The state has not provided a plan/strategy to provide information to the public about the current/ongoing situation.

## 2. Documentation of Aquifer Exemptions

Provide all documents that pertain to the State's requests for aquifer exemptions, EPA's approval or denial of such requests, and any post-primacy appeals by the State regarding aquifer exemptions (due August 18<sup>th</sup>)

<u>Status</u>: DOGGR started to deliver documents electronically (in small batches via email) to EPA on August 18<sup>th</sup> and also noted at that time that their search for significant, relevant documents would continue even as they were sending what they had already discovered. As the email

deliveries increased, EPA requested a disk containing all of the previously emailed documents. We received the disk from DOGGR on Sept 5<sup>th</sup> which contained about 175 documents. **We have not received any additional aquifer exemption related documents from the State.** The State also requested that we send them key aquifer exemption related documents, and we sent them a disk on October 2<sup>nd</sup> with about 75 documents.

#### 3. Tiered Review of Class II Wells

a. Provide the number and location of all Class II wells permitted to inject in non-hydrocarbon producing formations with water quality less than 10,000 ppm TDS (excluding the formations known to be exempt). For each well, submit: operator's name, well type, depth, field and formation names, date injection commenced, water quality of both injection formation and injection fluid, and other pertinent details. (Due August 18<sup>th</sup>)

<u>Status</u>: The State Oil and Gas Supervisor Steve Boehlen sent an email message to Jared Blumenfeld on August 18<sup>th</sup> which included an attached list of wells for which injection into non-hydrocarbon producing aquifers had been permitted by DOGGR. The list contained the information EPA requested, (and more), for 532 wells.

Based on EPA's review of the list, we requested more information from DOGGR about the ~175 wells they identified that showed formation water quality of less than 3,000 ppm TDS. DOGGR indicated that they did not have a lot of confidence in the data provided and that they were carrying out additional QA/QC on the well data they provided and should have a better data set by around mid-Sept. We also sent DOGGR a list of questions about the well data they provided. A second list was received on October 21<sup>th</sup>, and it raised additional questions.

# Status: We have not yet received a cleaned up data set, nor have we received responses to the questions raised.

b. Provide the number and location of all Class II wells permitted to inject in non-exempt hydrocarbon-producing formations with water quality below 10,000 ppm TDS. For each well, submit: operator's name, well type, depth, field and formation names, date injection commenced, water quality of both injection formation and injection fluid, and other pertinent details. (Due October 15<sup>th</sup>)

Status: A spreadsheet was submitted to EPA by DOGGR on

c. Submit a plan and timeline for completion of a searchable database of all Class II injection well information statewide (along with a GIS overlay of the injection wells, injection formations, and aquifer exemptions). (Due September 15<sup>th</sup>)

Status: The State has not provided a plan or timeline for completion of a searchable database. At a meeting with DOGGR on September 15<sup>th</sup>, they asked for more specific detail from us as to what exactly we are looking for in response to this item. We responded that we think the request is clear and that they have the knowledge and expertise of their injection well universe/existing data to respond with a plan and timeline.

c. Develop a plan and timeline for submission to EPA of any new or revised aquifer exemption requests, which the State determines are appropriate. (Due September 15<sup>th</sup>)

<u>Status</u>: At a meeting with DOGGR on September 15<sup>th</sup>, the State provided a draft 3-part strategy for: 1) an overall review of the State's UIC program; 2) Review of prior approval of existing injection wells; and 3) UIC permitting for proposed wells during the review.

The State's overall plan for reviewing the UIC program was not described in this draft (see item 4 below), however, the timeframe proposed for item 1 is 12-24 months, including any necessary new state rulemaking. For item 2, the State proposed to complete their review of existing wells by December 2014, and proposed a 2-year timeframe (until October 2016) for them to prepare, submit, and have EPA approve necessary aquifer exemptions where appropriate/approvable, or to eliminate injection where an aquifer exemption is not appropriate/approvable. For item 3, the State proposed continued consideration of new permit issuance/well authorization into sub-10,000 ppm aquifers (without prior aquifer exemption approval) if the State determined that the conditions/criteria for getting an aquifer exemption were met. Under the draft proposal, this approach would only be used until October 2016, after which all aquifer exemptions for existing operations would be completed and aquifer exemptions would need to be approved prior to any new permit issuance/well authorization.

EPA requested additional information on the anticipated number and scope of new project/permit approvals that DOGGR expects would need aquifer exemptions in the next two years (in addition to the number of existing projects that will require aquifer exemption approval). We also requested that the State clarify the project/permit/injection well approval process for Class II wells to get a better understanding of how aquifer exemption approvals can be integrated most efficiently into the process.

#### 4. State Program Consistency

Provide a status report on DOGGR's progress on the November 2012 Action Plan, which addressed Class II program deficiencies identified by EPA in our 2011 program audit. EPA also asked for a schedule for any proposed revisions to the Plan and for completing implementation of the Action Plan. (Due August 18<sup>th</sup>)

Status: The State Oil and Gas Supervisor sent an email message to Jared on August 18<sup>th</sup> and included a draft Work Plan for the UIC Program evaluation. The Work Plan did not include a lot of specific detail and contained no timeline or schedule for completion. In discussions with DOGGR, they acknowledged that the Plan was a very rough draft but they indicated that they were revising it and would be submitting a new draft to us shortly (discussions in late Aug/early Sept). We have not received a revised version of the August 18<sup>th</sup> Work Plan, however, it appears that the Work Plan may have been superseded by, or integrated conceptually into, the draft 3-part strategy provided on September 15<sup>th</sup>.